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GENTEEL ECONOMY.

It would be well for some of the more highly waged of our operative classes to know what is sometimes done, in the way of economical living, by persons whom they regard as their superiors. It often happens that a clergyman, a medical man, a teacher, or some other person of the so-called middle classes, has less income than an artisan. We lately heard of active ministers of the Established Church of England living on eighty pounds a year. We know that there are Episcopalian ministers in Scotland—officiating chiefly amongst the gentry—on similar stipends. Were there an advertisement for instances of surgeons and country schoolmasters not realising over a pound a week, we apprehend there would be an inpouring of answers like a spring-tide in the Severn or the Solway. Yet all of these people live with their families in a style notably more elegant and sightly than do the generality of such of the working-people as enjoy equal or larger incomes. And not only this; but they often contrive to educate their children, and bring them forward in life, in a way never dreamt of by the most highly salaried operatives.

A remarkable instance of this has lately been revealed through a privately printed memoir of Mr Thomas Thomson, advocate—an eminent legal antiquary, and the man to whom the public has been indebted for the arrangement of the national records of Scotland. This gentleman, who was the intimate friend and associate of Jeffrey, Cockburn, and all that set, sprung from a manse in Ayrshire, where the family income was £105 a year. The worthy clergyman not only gave his son Thomas the education required for the Bar, and the means of paying his fees on passing advocate, but reared another son to his own profession; besides whom there were other children to be provided for. How such feats were accomplished on so small means, while all the time the usual hospitalities of a rural parsonage were maintained, surpasses conception; yet we are assured they were performed, and the means were strictly no more than what is here stated; neither did the father of the family leave one shilling of debt.

It will be of no use to try to make out this as a peculiar and rare case, or as depending on conditions which only existed in a past age, for it is notorious that a very considerable proportion of the young men in both parts of the island, entering the legal profession, whether as barristers or solicitors, as well as those destined for the profession of the civil-engineer, and for service in India, are the children of clergymen possessed of incomes inferior to those enjoyed by many

operatives. The present chief-justice of England is one of the sons of such a clergyman; and many others could be pointed to, now occupying distinguished situations in life. It is a marvel of no rare kind, to see an English clergyman sending his son, or sons, to Oxford, for an education, calling, while it lasts, for an outlay equal to the entire annual proceeds of the benefice. In these cases, of course, there must have been a saving during many years in order to meet the requirements of a few.

How is it that persons of small income in the middle classes make such good and laudable results out of their little means? There can rest no doubt that it is done only by great self-denial and frugality. The principle at work is that of Genteel Economy. There are elegant tastes calling for gratification; but they are quietly set aside. There is accomplishment that might adorn the saloons of the affluent; but it is calmly, though perhaps with a sigh, condemned to waste its sweetness on the desert air. Scenes of public gaiety are avoided, because they infer dresses that cannot be afforded. The friend is left uninvited, because the family *ménage* can scarcely shew before a stranger. What is called a very quiet life—that is, a life without the excitement from society which is one of its necessities—is submitted to without a murmur, but not without suffering—sometimes not without positively hurtful consequences. The daily experiences of tradesmen and servants are often of a more enviable kind. Can anything be more affecting than a life in which so much that is needed, and that could be enjoyed, is dispensed with and postponed? We here see men and women to whom the future is more important than the present—to whom the intellectual is of more account than the material, the sentimental than the sensual—persons who, resigning themselves perhaps to a narrow and ungenerous lot, indulge the hope that their offspring will rise to something better, and for the realisation of that hope are willing and ready to make great sacrifices. If to make the future overrule the present, and to subordinate our own gratifications to those of some other person, is to advance in the scale of moral being, great praise is surely due to those who, from such motives, practise a genteel economy. Self-denial in such circumstances truly has in it that religious beauty which is only illuſively associated with the self-denial of the ascetic.

Amongst the hand-workers, there is often equal or superior means, but much seldomer the disposition to fashion the ways of a household to the attainment of some postponed benefit. Nor is this wonderful, when we consider that the sense of such benefits is not so apt to be engendered in that class of minds. The intelligent

member of the middle class sees what blessings attend refined life, when supported by sufficiency of means; he strains for those blessings, accordingly, for himself or his children. The artisan is shut out from contact with such things, and so far from hoping for, does not even think of them. Hence the so frequent and so sad spectacle of a *ménage* equally coarse and extravagant, luxury without comfort or refinement, and, what is more painful to look at, indulged in on the very brink of want and dependence. Till the sturdy operative shall be elevated by education and circumstances to higher ideas of what is really worth straining for in life, he will continue to fall far behind the genteel poor in these respects.

The Genteel Poor! name of pity and ridicule to many, a favourite theme of sarcasm among novelists and dramatists ever since modern fiction arose. And yet we do seriously believe that the genteel spirit is often not merely a softener of poverty, but a means of redemption from it. When the educated person of the middle classes is reduced to pennilessness, as often happens in this variable world, what is it that keeps him from sinking into and being lost in the obscure multitude but this spirit? what but this gives him the desire to struggle again up the slippery slope of fortune? A gentleman now in a very distinguished situation in life has assured us, that when he found himself in his youth brought by the misfortunes of his family into association with the humbler class of people, it was alone the *sense of the better sphere of life he had been in* which inspired him with the industry and self-denial by which he has worked his way so far upward. And we can well believe it. It may be called by such names as pride and vanity; but if these names be rightly applied, then we would assume and defend the position, that pride and vanity are things not without their use in our moral economy.

GLIMPSES OF AFFAIRS IN AMERICA.

FLORIDA—TEXAS—FUGITIVE SLAVE-BILL.

SYMPATHISING with the Americans in their unfortunate inheritance of slavery, and making every allowance for the constitutional difficulties which are presumed to surround any plan for its eradication, we must regret the manner in which this portentous evil has not only been suffered but actually stimulated to grow in dimensions. At no period since the foundation of the Union, has the number of slaves diminished; on the contrary, it has regularly increased; and at the period at which our narrative has arrived, 1820, it amounted to 1,538,064.

From the time the Missouri Compromise came under agitation, there was a succession of measures, all tending to extend the sphere of compulsory servitude. The first of these was the annexation of Florida, which did not excite any particular hostility. The peninsula of Florida—swampy, rich in alluvial marshes and savannahs, and eminently suitable for the production of rice and the sugar-cane—possesses a history abounding in picturesque incident. Discovered and settled by the Spaniards; captured by the English; then rendered back to the Spaniards; it ultimately, during the early years of the present century, became an object of desire to the United States—to which, by contiguity, it formed so convenient an appendage, that its fate from the outset could easily have been foretold.

The Americans, as their best friends allow, have never, on suitable occasions, been at a loss to make out a good case of injury, requiring smart reparation. The Floridians were a bad set. They had preyed like freebooters on American commerce, and the sufferers were denied all redress from Spain; they had excited the Indians to molest the frontiers of the states; and, worst of all, they had given refuge to runaway slaves

from Georgia and Louisiana. Such proceedings were intolerable. Pacific overtures having failed, the United States government despatched a military force to overrun Florida. Negotiations followed, in which the Americans advanced a claim to Texas, as having been a portion of the old French province of Louisiana, which the Spaniards ought long since to have relinquished. Spain was thankful to buy off this strange demand, and otherwise adjust the claims against it, by ceding Florida; the United States at the same time undertaking to indemnify citizens for their losses. In virtue of a treaty to this effect, Florida was taken possession of by General Jackson in the summer of 1821. As a territory of the Union, this hapless peninsula endured for some time the horrors of a war levied against the Seminole Indians, with a view to recover fugitive slaves and their descendants. The narrative of this ruthless war of races, aggravated by the use of bloodhounds to trace the Indians and negroes through the brakes and swamps, involves instances of more fearful suffering and daring heroism than perhaps any history of modern times. Finally, the Indians being subdued and removed in a body, and the real or alleged fugitives secured, Florida settled down into the ordinary condition of a state, with slavery as a legalised institution.

The claim on Texas on the above occasion, shewed pretty conclusively that there were parties in the United States who cast a longing eye in that direction. The practice of acquiring new countries and adding them to the Union, began with Louisiana and Florida, and with these precedents, might be carried to any extent. The desire for these territorial acquisitions, though partly owing to the restless character of the Americans, as well as to certain necessities in their position, arose in no small degree from causes connected with slavery. Not to speak of the exhaustion of lands by slave-labour, and the corresponding obligation to seek for fresh scenes of operation, there is an incessant natural increase in the slave population, which leaves to planters no choice between being eaten up by servants and sending them adrift through the agency of the slave-trader. On this account alone, there is positively no limit to the extension of slavery. Unless the surplus be carried off by emancipation—and to that the law in several states presents serious obstacles—there is no restricting it in amount or keeping it within a definite locality. Then, we have the commercial principle giving active impulse to the institution. Slave-breeders and traders rejoice in the prospect of new settlements and new purchasers; and if the matter rested with them, they would be glad to see the Union engulf country after country, till at length there was nothing more to incorporate. To this wild demand for territorial enlargement, the central government, for obvious reasons, can give no external concurrence in the first instance; but that is of little consequence. The condition of affairs in America is at all times favourable to the commission of daring exploits by private adventurers, whose acts can be repudiated or sanctioned as circumstances shall determine. In no country in Europe could be found groups of individuals at all to compare with these adventurers, of the true filibuster type. They are the refuse of the world—penniless, reckless, confident, and unscrupulous. Refugee Poles, Italians, and Frenchmen; exiles from the British Islands, bankrupt in character and fortune; Portuguese and Spaniards, with predatory habits acquired in the slave-trade or in freebooting; immigrant Germans, who, instead of pushing off to inland rural settlements, as is usual with their countrymen, have become frequenters of taverns, and copiously indulge in 'lager beer'; sons of American gentlemen, who, brought up without restraint, and having gone through their fortune, loiter about bar-rooms and gaming-houses, get up dog and cock fighting matches, and at

night tormenting the streets as rowdies—all are ready for any sort of mischief. Such are some of the elements of a filibustering expedition, of which, however, the 'white trash' of the south, by whom honest labour is deemed a disgrace, usually form the staple material. Equip, arm, and ship off company after company of this heterogeneous mass—see them land in grotesque costume, their trousers stuffed into dirty boots, their striped or red woollen shirts, their rusty beards, hats of every imaginable shape, belts stuck with bowie-knives and revolvers, and rifles slung over their shoulders—chewing, spitting, swearing—and you have an army of marauders such as, we venture to say, could be nowhere else produced on the face of the earth.

Nature accomplishes great designs by rough agencies. The Old World was not peopled and settled as we now see it, without going through centuries of violence and bloodshed. Greeks, Persians, Romans, Goths, Saxons, Normans, and Sea-kings, all in their turn conquered without justice or mercy. But that was long ago, and one imagines that, under the lights of Christianity and modern civilisation, things should be managed differently. True in one respect, but not in another. Much of the American continent is now going through its ancient and middle ages. Filibusters are the Sea-kings of the nineteenth century. Who is to restrain them, so long as they confine their stealthy attacks to regions under a weak rule, adjoining the southern states, and the annexation of which to the Union flatters the desire for national aggrandisement? If to this we add the ardent demand for new territories over which to disseminate slave-labour, the impulse for acquisition not only becomes irresistible, but, to judge from past events, is almost certain to receive the countenance of the highest federal authorities.

Looking about for means of advancing their interests, slaveholders and slave-traders saw no outlet so available as that westwards along the Gulf of Mexico into Texas. This province, of almost matchless fertility, producing cotton equal to the finest in the United States, extended over twelve degrees of latitude, with an area large enough to form eight or nine ordinary sized states; and it was calculated that, if freely opened to planters and their servants, the value of human stock would probably rise fifty per cent. Ever seeking new spots for settlement, parties of emigrants had begun to find homes in Texas as early as 1819. They were chiefly from the north, and, for the sake of material interests, were fain to submit to the petty tyranny which usually accompanies the Spanish rule. Some years elapsed before there appeared any chance of success for a filibustering expedition. As soon, however, as Mexico had shaken off Spain, and declared itself a republic, things seemed ripe for striking a blow. From this time, 1834-5, we hear of migration into Texas on a formidable scale. It is no longer parties of industrious yeomen who come across the frontier, but companies of armed men, under southern leaders of military reputation. Claiming to have territorial rights under grants from Mexican authorities, there arrive in their train, flocks of greedy speculators and jobbers, holders of scrip in real or pretended joint-stock land companies, besides a floating mass of adventurers anxious to secure whatever good might fall in their way—and when we recollect that there was a country as large as France to be won by dint of a little impudence and fighting, and that the first-comers had the best chance, the rush to Texas is no great matter for surprise. The method of appropriation, however, is curious. It resembles nothing so much as that of a lodger who, taking a fancy to his quarters, begins by finding fault with his landlord, and ends with turning him out of doors. Clearly, the Americans had no business in Texas—not any more than the English had in India—and if they went thither, it was their duty as foreigners to remain quiet. But good order and respect

for rights are, in such cases, against all rule. How the Texan settlers and their allies picked endless quarrels with the wretched government to which the province nominally belonged—how, under General Sam. Houston, the invading host unfurled the standard of rebellion—the significant lone-star—which like a meteor they carried through the country, as far as the banks of the Rio Grande del Norte—how they overpowered the Mexicans, and in one of their battles captured Santa Anna, whom they set at liberty only on having conceded to them the independence of Texas—are all circumstances well known. In short, in the space of two years, by the desultory movements of a body of unauthorised adventurers, an extensive and valuable province was wrested from Mexico. The brilliance of this exploit is somewhat lessened by the fact, that a large army entered Texas, by order of the United States government, professedly to allay Indian disturbances, but really to hang about as a reserve, to countenance, and, if need be, to support, the filibusters. The object of the invasion was never a matter of doubt. It was to secure independence, and then to seek annexation, with a view to strengthening southern interests, by adding several new slaveholding states to the Union. On the character of this splendid manoeuvre, we should prefer allowing an American writer to speak. 'Some crimes by their magnitude,' says Channing, 'have a touch of the sublime; and to this dignity the seizure of Texas by our citizens is entitled. Modern times furnish no example of individual rapine on so grand a scale. It is nothing less than the robbery of a realm. The pirates seize a ship. The colonists and their coadjutors satisfy themselves with nothing short of an empire.' Shrinking from annexation, he adds that this act will be accomplished only at the 'imminent peril' of American 'institutions, union, prosperity, virtue, and peace.'*

In the wilful perpetuation and extension of slavery—its infliction on a country from which it was expelled—lies, perhaps, the chief odium of this great deed of spoliation. Although accustomed to look with contempt on Spain and the transatlantic nations which she has planted, we are obliged in the present instance, as an act of simple justice, to state, that when the Mexicans attained to independence, they at the same time loosened the bonds of the slave—decreeing, 'that no person thereafter should be born a slave, or introduced as such into the Mexican states; that slaves then held should receive stipulated wages, and be subject to no punishment but on trial and judgment of the magistrate.' Doubtless, these humane provisions were partly a consequence of the large infusion of mixed breeds and persons of colour in all ranks of Mexican society; but be this as it may, slavery had been abolished in Texas when it fell into the hands of the Americans. After this occurrence, however, slaves were rapidly introduced, and with avowed slavery institutions, the republic claimed to be admitted into the Union. When annexation was formally proposed, there was a considerable division of opinion as to its expediency. Petitions were presented to congress, and Daniel Webster, among other men of note, offered some wholesome oratorical opposition to the measure, on the ground that the admission of so large a region as Texas would give a most undue preponderance to the South. In one of his speeches, he says: 'I frankly avow my entire unwillingness to do anything which shall extend the slavery of the African race on this continent, or add other slaveholding states to the Union. When I say that I regard slavery in itself a great moral, social, and political evil, I only use language which has been adopted by distinguished men, themselves citizens of slaveholding states. I shall do

* Channing's Letter to the Hon. Henry Clay, on the Annexation of Texas. 1837.

nothing, therefore, to favour or encourage its further extension. In my opinion, the people of the United States will not consent to bring a new, vastly extensive, and slaveholding country, large enough for half-a-dozen or a dozen states, into the Union. IN MY OPINION, THEY OUGHT NOT TO CONSENT TO IT. Indeed, I am altogether at a loss to conceive what possible benefit any part of this country can expect to derive from such annexation. All benefit to any part is at least doubtful and uncertain—the objections obvious, plain, and strong. On the general question of slavery, a great portion of the community is already strongly excited. The subject has not only attracted attention as a question of politics, but it has struck a far deeper-toned chord—it has arrested the religious feeling of the country; it has taken a strong hold on the consciences of men. He is a rash man, indeed, and little conversant with human nature, and especially has he a very erroneous estimate of the character of the people of this country, who supposes that a feeling of this kind is to be trifled with or despised. It will assuredly cause itself to be respected.' In conclusion, he said: 'I see, therefore, no political necessity for the annexation of Texas to the Union—no advantages to be derived from it, and objections to it of a strong, and, in my judgment, decisive character. I believe it to be for the interest and happiness of the whole Union to remain as it is, without diminution and without addition.'

Expostulation was useless. By the election of Mr Polk as president, November 1844, the people shewed their desire for annexation. When the subject was debated in congress, a resolution to annex was carried, and Texas was accordingly incorporated as a state in 1845, without any restriction as to slavery. It was provided that four new states of convenient size might afterwards be formed out of it; and further, that slavery, at the discretion of the inhabitants, might exist in all the new states, south of 36° 30' north latitude, commonly known as the Missouri Compromise line.

Out of the annexation of Texas sprang a war, which in its turn produced still greater extensions of the Union. According to Mexican topography, the boundary of Texas on the west was the river Nueces. The Texans, however, insisted that the proper limit was the Rio Grande del Norte; and in 1846, an army of occupation under General Taylor was marched into the disputed region. On this and some other grounds of dispute, a collision with the Mexicans ensued; and for two years subsequently, there raged a war by sea and land with the United States. The result, as might have been expected, was disastrous to the Mexicans, who were no match for the Americans. Under General Scott, the war was prosecuted with consummate skill, and nothing could have been more easy than the conquest of the whole of Mexico, had it been expedient to carry matters that length. By the final terms of adjustment, the United States government paid large sums to Mexico for extensive tracts of country which might have been retained or taken by force. The possessions acquired on this occasion included California, and certain regions in the interior, now composing the territories of New Mexico and Utah—in fact, by these annexations, in conjunction with rights founded on pre-occupation, the dominion of the United States engrossed the entire continent from the Atlantic to the Pacific, and from the British possessions on the north to the shrunken republic of Mexico on the south; and it seemingly became only a question of expediency as to the time when all that remained of Mexico should swell the gigantic proportions of the Union.

To procure a command of money for the purchases from Mexico, a bill of appropriation was laid before congress. Now ensued a long and entangled contest between parties respecting the restriction or non-restriction of slavery in the lands about to be acquired from Mexico; it was, in fact, a resumption of the old

dispute, whether congress had the power to determine the institutions of the territories. The debate in the first instance turned on the motion of Mr David Wilmot of Pennsylvania, usually called the Wilmot proviso, which was to the effect of passing the bill, 'provided neither slavery nor involuntary servitude shall ever exist in any part of the territory to be acquired from Mexico.' This and similar restrictive clauses were lost. In the succeeding congress, 1847, a bill was carried to organise the territory of Oregon, according to the provisions in the ordinance of 1787. This latter point, which insured freedom to the territory, was carried with some difficulty. It may here be added, that the territory of Minnesota was organised, 1849, and that of Washington, 1853, both with free institutions. The northern situation of these territories, we presume, rendered them not very available for slavery.

During the passage of the Oregon bill, an attempt was made by the slaveholding interest to extend the line 36° 30' to the Pacific; but it was defeated. The object of the movement was, in effect, to make a distinct division of the United States into North and South, each with its peculiar institutions. Such a division was felt to be essential to the permanence of slavery; for if, at any subsequent period, free states should be organised on the borders of Texas, they would be a ready refuge for the whole slave population. The defeat of the proposed division, which was a kind of northern triumph, did no more, however, than postpone for a short time the tug of war. Hitherto, while there were plenty of new lands north and south to annex, free and slave states had been added in so equal a proportion, that the numerical balance was kept tolerably even. Now, the unoccupied lands in the north were becoming scarce; many new free states in that direction were hopeless; and if the balance was to be maintained, the North would require to seek for an equivoque south of the line of the Missouri Compromise. The game of pitching new states into the Union was getting serious—the result critical.

Nations, like individuals, usually add more to their cares than their comforts by their acquisitions of property. The United States had from small beginnings become a mighty empire; but while prosperous in its material interests, it was torn with intestine commotions. It had acquired enormously large possessions in the south; but what was to be done with them? Eager discussions respecting these acquisitions occurred in the congress 1849-50. Zachary Taylor, the new president, having recommended the organisation of California as a state, and New Mexico and Utah as territories, of the Union, there arose a contest on that everlasting subject—the imposition of restrictions as to slavery. Once more, Henry Clay interposes to allay the storm with an ingeniously complicated and specious compromise. To understand the purport of this beautiful piece of legislation, it is necessary to have some notion of the state of affairs since 1834. The invasion of Texas, and its probable results in extending slavery, greatly stimulated the party of Abolitionists, who about this time began to agitate with uncommon zeal—perhaps more zeal than discretion—through the agency of speeches, pamphlets, and petitions. One of the things they especially demanded was the expulsion of slavery from the District of Columbia, where it was a scandal to the official capital of the States. So numerous were the petitions presented to congress on this and analogous subjects, that at length the extraordinary resolution to receive no more was adopted, and for several years the very right of petition was so far suspended. It was during this turbulent decade (1830-40), that a bill was brought in to extend the slave state of Missouri. The prescribed boundaries of this state on the west having excluded a triangular district, which remained free soil in virtue of the

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ordinance of 1787, the incorporation of it was anxiously desired by the Missourians, for it was exceedingly fertile, and lay on the route to the rich and still unappropriated lands of Kansas. Strange to say, the bill to incorporate this region—legally insured to freedom—was passed in 1836 without any perceptible opposition. The tract so annexed composes six counties, and has become one of the most populous and wealthy sections of the state, devoted to the growing of hemp, tobacco, and other articles, and cultivated by slaves. This, we are told, 'is the most pro-slavery section of the state, in which was originated, and has been principally sustained, that series of inroads into Kansas, corruptions of her ballot-boxes, and outrages on her people, which have earned for their authors the appellation of *border ruffians*.*'

Not discouraged, the ultra anti-slavery party kept up a constant war of argument and remonstrance through the press. The Texan invasion and its consequences imparted fresh energy to the remonstrants. Petitions for a dissolution of the Union, for amendments in the constitution, for a reform of the representation, were poured into congress, and when discussions arose respecting the admission of California, the contest overshadowed all other questions. Clay, as has been said, now comes on the scene, with his plan of conciliation, which, being embodied in several bills, was cleverly carried through congress in August 1850. This famous 'omnibus' measure, as it was called, was worthy of Clay's genius. The South had complaints against the North, on account of the difficulties thrown in the way of recovering fugitive slaves. The North complained that slavery continued to exist in the District of Columbia. Clay projected some mutual concession on these points; and as the South was the more intractable, adjusted its demands by conceding that the inhabitants of the new southern acquisitions should exercise the right of introducing or excluding slavery; further, the original compact with Texas was confirmed, and its western boundary fixed at the Rio Grande del Norte. California was admitted as a state, and New Mexico and Utah as territories, on the basis of 'squatter sovereignty'—a circumstance of no moment, as it proved, to California, which, though already intruded on by some planters and their slaves, made choice of freedom. Slavery was not abolished in Columbia, but the slave-trade and open sales of slaves were prohibited under heavy penalties in the District. Lastly, the Fugitive Slave Bill strengthened those provisions in the federal constitution for recovering runaways, which in many parts of the country had become practically inoperative. These united measures did not become law without incurring opposition on both sides; but we are concerned to observe, that in all the divisions in the legislature, members from free states voted with the South—the only rational explanation of this being, that the principle of freedom *versus* slavery had not attained force sufficiently distinct to overcome party connection or individually selfish considerations. Among the eminent men who on this occasion voted in violation of formerly professed principles, was Daniel Webster—a circumstance of which he was so painfully reminded by his rejection at a convention for proposing candidates for the presidency, that he languished and died 'a damaged man,' October 1852. Clay, a short time before, made an equally abrupt and unlamented exit.

It is now, we believe, generally admitted by its partisans, that Clay's Fugitive Slave Bill was a grave political blunder; for, besides failing in its professed object, it exasperated the North in no ordinary degree, and, more than anything else, has there promoted an unconquerable hatred of slavery and all engaged in its

support. Of the working of this most odious measure, we may afterwards have occasion to speak. Meanwhile, it is enough to say, that it is already as much a dead-letter in several northern states as were the original obligations on which it was founded. So much for Clay's omnibus measure, which was to insure universal harmony! So much for what a committee of congress in 1854, sagaciously proclaimed as having been 'a final settlement of the controversy, and an end of the agitation.' Well may one say, with how little wisdom is the world governed!

With the incentives to increase, to which we have drawn attention, it will not be thought remarkable that in 1850, the number of slaves in the United States had risen to 3,204,313. W. C.

THE SHOE-BLACK BRIGADE.

SOMEWHERE about a year ago, a friend pressed upon my attention what he termed the Shoe-black Brigade of London, and expatiated so long and freely upon the excellency of the institution, upon the good it had effected and was effecting, and the support it deserved from the public, that the desire to inquire further about, nay, rather to look into its operations and to examine its merits, became irresistible. The facts which have come to my knowledge, in the course of this investigation, are of so interesting a nature, that I make bold to lay them before the general reader, feeling assured he will derive the same pleasure from the perusal of the following details that I experienced in collecting them.

The institution is unique in its way: in no part of the world can its like be found. Shoe-brushing establishments, it is true, exist elsewhere: in most French towns of any importance, shops, or rather saloons, are elegantly fitted up with broad easy divans, covered with rich crimson-velvet, running round them, and invariably recognisable by the inscription, printed in large letters over the entrance, *Ici on ciré les bottes*. At the corner of every street you may also meet with a *commissionnaire*, dressed in a bottle-blue suit of corduroy, with a large tin badge upon his left arm, sitting on or leaning over a box, the inside of which contains his brushes and his *verni*; and, for a couple of sous, you may have your trousers cleansed and an exquisite polish given to your upper leather.

Still, nowhere will you find a company, a guild of shoe-blacks, organised in the same manner, with such high aims, with such generous and philanthropic objects in view. In the one case, the hard necessity of getting a livelihood is the object, and men, not boys, are the operators; in the other, the desire of finding employment for the poor and neglected children of the streets and alleys of our overgrown metropolis, originated the system, and it has subsequently proved a valuable stepping-stone to something better—to something higher. The purpose of the institution is not reformatory; the object of its promoters is rather to keep those under their charge from falling into vicious courses of life, which would certainly lead them to the reformatories, or, if not thither, to the prisons or the galleys. Their motto might well be, 'Prevention is better than cure.'

It appears, that about five or six years ago, a number of gentlemen, principally members of the Temple or Lincoln's Inn, taking a lively interest in the future of the children of those marvellous academies for the hungry and naked, those Samaritan universities for the hitherto poor and neglected—the Ragged Schools—formed themselves into a committee for the purpose of finding out and organising remunerative occupation for the scholars who conducted themselves well, and were desirous of rendering themselves useful. With this view, a company of shoe-blacks, broomers, and messengers was set on foot. The idea of public shoe-

* History of the Struggle for Slavery Extension or Restriction. By Horace Greeley. Dix & Edwards, New York, 1856.

blacks was a revived rather than an original one, since, years ago, our forefathers used to enjoy the luxury at the corners of the streets. The opening of the Great Exhibition, however, and the expected influx of visitors from all parts of the world, favoured, if it did not suggest the idea in the present instance, as it seemed to afford a splendid opportunity for employing the children of the Ragged Schools largely to their own profit.

Accordingly, on Monday the 31st of March 1851, five boys were selected, and sent out for the first time to work in the streets. A few weeks sufficed to determine the success of the enterprise. By the end of July, thirty names were enrolled on the books of the committee.

One of the great difficulties, however, the promoters of the scheme had to contend with, was the selection of proper sations for the boys, since the commissioners of police regarded with rather a reluctant eye this innovation, being apprehensive of having their high-ways and by-ways obstructed by a corps of disorderly shoe-blacks; though it did probably occur to them that this corps would be far less troublesome when earning thus a decent livelihood, than afterwards, if allowed to run adrift upon society. The orderly conduct of the boys themselves, however, overcame the scruples of the civic functionaries; special posts were established, and divisions formed, not only with the sanction, but under the protection of the superintendent. The receipts of the first six months, it was found, were larger than they have been since within the same period. This is to be attributed to the great influx of foreigners and country-people flocking to London during these months. But the occasion gave a fair start to the enterprise; and it went on extending its ramifications, until it was found necessary to break up the original society into three distinct bodies, for the better working of the system.

The three societies are—the Original Shoe-black Society, head-quarters Maiden Lane, Covent Garden; the East London Society, head-quarters High Street, Whitechapel; and the South London Society, head-quarters High Street, Borough.

No boy can be admitted into any of these societies except on the recommendation of the superintendent of a Ragged School in connection with the Ragged School Union. The *postulant*, or candidate for employment, must also bring a printed form, properly filled up and signed, stating his name and age; the length of time he has attended school; whether he has at any time been employed in service; whether he has been in prison; whether his parents are living, &c. It should be observed, too, that the committee prefer boys between the ages of twelve and fifteen, since experience has shewn that the disposition is then more tractable, the character more quickly formed, and the boys more willing to undergo the training necessary to fit them for their duties. It is then they begin to understand the utility of the discipline they are subjected to, and can best appreciate the motives which influence their teachers and directors.

When a youth enters, he is first initiated into the mystery of handling the brushes. To give perfection in this branch, only a few days' practice are deemed requisite, and he is then sent forth upon trial, not as one of the elect, but simply as a novice. The term of probation lasts a month, during which time the boy is expected to continue his connection with the school from which he came, and to attend it Sundays as well as week-day evenings as often as he can. To insure regularity in his attendance, he receives a card, on which the superintendent marks the number of times he is present. This card is given up on Monday mornings, and the times of attendance noted down. If the boy, on probation, proves steady, industrious, and skilful in his new occupation, he is regularly admitted, and dons the uniform of the society of which

he is made a member, and is provided with the necessary implements out of the general fund.

The uniform not only enables the superintendent to recognise his protégés, but the public also; so that by thus making the youths conspicuous in the street, it serves as a check upon any irregularity on their part. Much the same sort of plea retains the odd, quaint dress of the times of Edward VI. in Christ's Hospital. The boys of the Original Society are distinguished by a *red jersey* and cap with a *red band*; the East London Brigade by a blue uniform; whilst the boys of the South London Society wear a yellow or canary-coloured jersey, with a cap with a yellow band. Badges, again, are required to indicate each individual of these several corps; consequently, either on their breast or right arm, or sometimes on both, a piece of cloth is sewn, bearing a particular letter or letters, worked in white beads by the children of the Lisson Street Refuge. This institution, whose services are thus made available, was founded in 1850 by a few charitable ladies, who interested themselves greatly in the female branch of the Ragged Schools. Perceiving that, unless the poor girls taught in these establishments were separated from the kind of life they had led and were leading, the good achieved by the schools would be neutralised as they grew older, these kind ladies hired a few rooms, which were fitted up for the boarding and lodging of seven. Since then, however, 150 have been received into this asylum, of whom sixty-six have been provided for, and the rest returned home to their friends. Whilst in the Refuge, they are trained to become useful servants, and taught reading, writing, ciphering, &c., as well as needle-work and straw-bonnet making. There is also another establishment which we must notice *en passant*, in reference to the Ragged Schools' Shoe-black Society. We allude to the Grotto Passage Ragged and Industrial Schools. Here tailoring, shoemaking, mat and rug weaving, box-making, hair-picking, and wood-chopping, are the principal occupations pursued. And it is here that the boxes containing the blacking and the brushes for the shoe-blacks, and the mats on which they kneel, are fabricated, so that one institution aids the other in becoming self-supporting.

It may here be observed, that the boxes and uniforms are regularly deposited at the offices of the different societies, as soon as the day's work is over; and if the lads return home, they return home in the plain suits in which they came, or others left at the offices by charitable persons, for the use of the most ill-clad. After their first equipment, too, the boys have to purchase both their uniforms and implements, but these they obtain at half-price. The object is to relieve the society as far as possible of unnecessary burden, and to render the boys careful in the use of what they have received gratis.

At seven o'clock in the morning, the boys assemble at head-quarters. Prayers and passages from the Scriptures are then read, either by one of the committee or the superintendent. Before the Blue and Yellow Societies had established more central points for assembling, some of the boys came in from great distances—from Maida Hill, Whitechapel, and even from Narrow Street, Ratcliffe—to the offices then in York Place, Strand. One boy, for nearly two years, came every morning from the east end of London, and returned at night; thus walking more than eight miles, besides the distances between the office and his station, which sometimes exceeded two miles. It was with the object of reducing the distances the poor boys had to travel to their head-quarters, that the society was broken up into three divisions. When prayers are concluded, the boys disperse to their different stations, where they remain till the evening. The hour of return, however, varies according to the time of the

year—being four o'clock in winter, and half-past six in summer. During the day, the lads are frequently visited at their posts by the superintendent or his assistant, who observes their conduct, and supplies them with blacking should they want it.

The sum of one penny only is allowed to be asked for brushing the trousers and cleaning the boots; but sometimes more is given—a practice which the committee discountenance, as it is apt to make the lads dissatisfied with their legitimate remuneration. A daily account is kept with each boy, who surrenders into the hands of the superintendent his daily gains, which are thus disposed of: Sixpence is returned as a regular allowance; the remainder is divided into three equal parts, one of which is given to the boy in addition to the sixpence, one retained by the society towards defraying the working-expenses and making the institution self-supporting, and one is deposited in a fund reserved as a bank for the future benefit of the boy. By this regulation, three shillings a week at least is guaranteed to each boy; and should his earnings fall below sixpence a day, the difference is charged to his bank. This, however, rarely happens; for it has been ascertained that, by industry and proper attention, a shoe-black can make on an average two shillings a day; and if his earnings habitually fall below that amount, he is deemed unfit for the employment, and discharged from it. It has also been ascertained that different stations have different values, and further, as a general rule, what the value is. Accordingly, to equalise as much as possible the earnings of the boys, they were not allowed to remain more than three days at the same post. Originally, all the stations were occupied by the lads in succession; but for some time past the stations have been divided into three classes. This arrangement was made with a view of enforcing a better discipline, by introducing the system of promotion. Twelve of the best boys were placed in the first class; fourteen in the second; and the remainder in the third—the third being the lowest class, into which all new-comers entered. In the early part of 1855, however, an important change was effected at the suggestion of the chief-commissioner of the city police. The boys employed within the walls were classed separately, and now work only at stations within the city boundaries. Since then, four classes of stations have been established—the first and second, city; and the first and second, town.

Every week, a list of each boy's earnings is made out and suspended in the office of the society to which he belongs. This list is anxiously scanned by each member, as thereby he knows the state of his revenue. As soon as a boy's capital amounts to ten shillings, he is allowed to draw it out to provide himself with good working-clothes, or other things necessary for his comfort; and should he desire afterwards to draw further sums, he can do so, but only with the consent of the committee. The weather and the seasons make considerable difference in the profits of the day. Warm sunny weather, with a few showers, is the most auspicious; a heavy wet day is the least favourable; but a public holiday is the best of all. On the 2d of May 1854, two boys, stationed at the Wellington statue, Royal Exchange, made between them L.1, 1s. 8d., or 10s. 10d. each, the largest sum earned by any boy in one day. The economical principle upon which the banks are conducted enables the more steady boys to realise considerable amounts. According to a report printed two years ago, one lad had the sum of L.7, 18s. 4d. to his credit; whilst another had accumulated no less a sum than L.23, 11s. The latter youth was promoted for his good conduct to the rank of assistant, or, as it is more commonly called, inspector. He has since emigrated to Australia, and in that favoured land realised, doubtless by habits acquired under the care of the society, a large sum of money.

When a lad leaves the service, or rather the protection of the society, the balance in his favour in the bank is paid to the superintendent, to be laid out for his benefit. Many have by this means been apprenticed; some have obtained outfits for emigrating; and some good clothes to enter respectable situations.

The average number of boys employed by the Red Society rose from twenty-four in 1852 to forty-eight in 1856; and their earnings in the last-mentioned year amounted to L.1432, 8s. 7d. The Yellow Society, the youngest branch, has been established only two years; average number of boys, twenty-eight and thirty-two; and aggregate earnings for the two years, L.894, 17s. 4½d. But the Blue Society (East London) possesses a feature in its administration peculiar to itself. 'It goes'—to use the words of a zealous promoter of this branch—'still lower in the scale than the other two; for while they employ only those boys who have homes, we—the Blue—take the houseless and most destitute, cleanse them from their filth and vermin, and so completely change their outward appearance, that their former acquaintance scarcely know them again.' To accomplish this object, and in connection with the society, a Refuge has been fitted up, in which twenty-one boys are clothed, fed, lodged, educated, and taught tailoring, shoe-making, and shoe-blackening. Originally, the boys brought their dinners with them, and even breakfasts, which they ate before leaving head-quarters. But as it was found their appetites returned sharply before evening, the committee provided a refreshment-room on their premises, which was conducted by a matron who received the profit, and bore the risk of the department. Bread and butter, eggs, herrings, pies, oranges, pudding, coffee, and soup were there consumed by the boys after the labours of the day were over. This also kept the so-disposed shoe-blacks from adjourning to neighbouring coffee-shops to supper.

To enter the Refuge above mentioned, a note of recommendation from the superintendent of the Ragged School must always be brought by the candidate for admission, when a colloquy to the following tenor takes place.

- 'Where do you live?'
- 'I live nowhere, sir.'
- 'Where do you sleep?'
- 'Anywhere, sir.'
- 'Where are your parents?'
- 'Dead, sir.'
- 'How long since?'
- 'Father about four years, mother one.'
- 'How have you got your living since?'
- 'Doing anything, sir.'
- 'Can you read?'
- 'A little, sir.'
- 'How long since you had a shirt on?'
- 'I don't know, sir.'
- 'Are you willing to work?'
- 'Yes, sir.'
- 'Do you know how to get your living?'
- 'No, sir.'

But a letter of introduction from the superintendent of a Ragged School is not always essential. Misery and destitution have sometimes been the sole recommendation. 'We have now'—to quote again the gentleman above alluded to—'a very superior lad, who has been respectably brought up, and can read and write well; but who, on account of the loss of both parents, became quite destitute, and was brought to me by our boys in a perishing condition. We expect to make an inspector of him.'

If approved of, the boy is admitted at once, conducted to the dormitory, washed, fed, housed, equipped in the blue uniform, and instructed in the crafts we have already enumerated. Since the formation of the Refuge, 322 boys have been admitted, of whom 169

left it of their own accord, 47 were dismissed as incorrigible, and 106 were reclaimed, of whom several were once reputed thieves. These are important facts; and the committee, in a report recently published, express their belief that it cannot be shewn by any other society that 106 boys have been effectually reclaimed from the streets, and put into the way of obtaining their own living so cheaply—the average cost of each boy being only L.1. A great feature in the society again is, that the boys help to pay the expenses incurred in reclaiming them.

We have now briefly to notice the means adopted to enforce discipline and to carry out this beneficial system of training. It is not to be supposed that this is by any means an easy task; not only great patience but great tact must be employed, in dealing with the variety of characters that are introduced to the managers or superintendents of the societies. Of course, the chief object is to gain the child's affections, and to make him sensible of the obligations he is under to those who thus interest themselves so much in his behalf. He is also shewn how much it is his own interest to co-operate with those who undertake to provide for his future and direct his steps. But this is not altogether sufficient. A regular course of control is necessary, and it has been found that this cannot work without a system of rewards and punishments: *Fines*, for late hours, absence, or other misbehaviour; *Degradation*, from one division to a lower, either permanently or for a limited period; *Suspension* from work for a fixed time. Generally speaking, the boys acquiesce in the justice of their sentence, and willingly submit to its execution. The system of rewards consists in giving prizes in money, varying from sixpence to half-a-crown, and amounting in all to ten shillings, presented to the two boys in each division whose monthly earnings have been largest; *medals*, presented to the first boys in the three first divisions; and *promotion*, from a lower to a higher division. The results of this system proved its effectiveness in every respect. So far back as June 1852, Mr McGregor, one of the first members of the committee which organised the Original Ragged School Shoe-black Society, when examined before a select committee of the House of Commons on 'criminal and destitute juveniles,' declared it as his conviction, founded on experience, 'that boys could be taken as nuisances from the streets, and as criminals from the jails, and be made useful servants to the public, able to earn an honest livelihood during their reformation, and finally become religious and respectable lads, or leave as useful colonists.' The experience of subsequent years corroborates still more strongly and permanently this report. When further examined on the means employed to achieve this noble object, and the character of the work to which the boys were set, Mr McGregor replied, 'that the nature of the occupation was comparatively unimportant, if industry were immediately rewarded, and not merely enforced; if permanent employment were held out in prospect; if good and bad conduct were made directly apparent to the other lads and to the managers; emulation promulgated by classification; honesty, by constant money transactions where trust is involved; economy, by daily saving; attention to respectability of appearance, by enforcing proper clothing; punctuality, by fixed hours; steadiness, by requiring prolonged attention to duties at a certain post; learning, by promoting to stations requiring it; love of home, by providing for those who would be otherwise without a shelter.' It is highly gratifying to our natures to know that youths who, but a year or two since, perhaps but a few months since, were wandering about the streets pilfering and begging, have been so transformed in their conduct and affections; and that of these, a large number support their parents—parents

who probably have entirely neglected them, and through whose immoral and dissipated habits they had themselves been obliged to roam about, aimless, houseless, and breadless.

To shew the special adaptability of the shoe-blackening system to carry out this great work, it is only necessary to give a short account of two employments which we have already alluded to, and which, starting almost contemporaneously with the above society, or rather issuing from it about the same time, ceased shortly after—the Broomers, a name invented for the occasion, and the Messengers. The duty of each broomer was to keep the pavements clean in front of twenty shops. Regent Street, Bond Street, and Waterloo Place, were divided into districts; and on the 10th of November 1851, boys were sent out. By the 12th of January following, twenty-one boys were employed; but from this time their number was gradually reduced, until in the end of March the enterprise was altogether abandoned, it being found insufficiently remunerative; though, we believe, the pecuniary difficulties were not so much the motive for its abandonment as the impossibility of preserving so strict a discipline over the broomers as over the shoe-blacks. In 1852, the other variety of labour was introduced into the working of the society. Four boys were employed as messengers, dressed in blue trousers and scarlet jackets, and provided with a check-book, to enter the addresses of parcels, and to give receipts if required. The sum charged was twopence for the first half-mile, and one penny for every additional half-mile; the boys being stationed at the Bank, the Exchange, and the Electric Telegraph Offices. The committee promoted to this employment the most industrious boys, who had in their banks a sufficient sum to guarantee the value of parcels to the amount of L.3. The Electric Telegraph Company occasionally intrusted the messengers with their dispatches; and one of them was employed by the Crystal Palace Company to distribute their circulars. A respectable publisher also employed four of the society's boys for several weeks in sending out the copies of a new serial. Notwithstanding this patronage, the occupation of a messenger was found to be less remunerative than that of a shoe-black, especially as it was necessary to promote to that office the most active and intelligent of the boys. Towards the close of 1852, therefore, this project was abandoned.

Since that time, the committee have confined the employment of the boys to the ordinary occupation of a shoe-black—with what results, we have endeavoured to shew.

THE WAR-TRAIL:

A ROMANCE.

CHAPTER XIV.—LOVE-THOUGHTS.

A DREAD feeling is jealousy, mortified vanity, or whatever you may designate the disappointment of love. I have experienced the sting of shame, the blight of broken fortune, the fear of death itself; yet none of these ever wrung my heart so rudely as the pang of an unreciprocated passion. The former are but transient trials, and their bitterness soon has an end. Jealousy, like the tooth of the serpent, leaves its poison in the sting, and long and slow is the healing of its wound. Well knew he this, that master of the human heart: Iago's prayer was not meant for mockery.

To drown my mortification, I had drunk wine freely at the ball; and on returning home, had continued my potations with the more fiery spirit of 'Catalan.' By this means I gained relief and sleep, but only of short

duration. Long before day, I was awake—awake to the double bitterness of jealousy and shame—awake to both mental and physical pain, for the fumes of the vile stuff I had drunk wrecked my brain, as though they would burst open my skull. An ounce of opium would not have set me to sleep again, and I tossed in my couch like one labouring under delirium.

Of course the incidents of the preceding night were uppermost in my mind. Every scene and action that had occurred, were as plainly before me, as if I was again witnessing them. Every effort to alienate my thoughts, and fix them upon some other theme, proved vain and idle; they ever returned to the same circle of reflections, in the centre of which was Isolina de Vargas! I thought of all that had passed, of all she had said. I remembered every word. How bitterly I remembered that scornful laugh!—how bitterly that sarcastic smile, when the double mask was removed!

The very remembrance of her beauty pained me! It was now to me as to Tantalus the crystal waters, never to be tasted. Before, I had formed hopes, had indulged in prospective dreams: the masquerade adventure had dissipated them. I no longer hoped, no longer permitted myself to dream of pleasant times to come: I felt that I was scorned.

This feeling produced a momentary revulsion in my thoughts. There were moments when I hated her, and vengeful impulses careered across my soul.

These were fleeting moments: again before me rose that lovely form, that proud grand spirit, in the full entirety of its power, and again my soul became absorbed in admiration, and yielded itself to its hopeless passion. It was far from being my first love, and, thus experienced, I could reason upon it. I felt certain it was to be the strongest and stormiest of my life.

I know of three loves distinct in kind and power. First, when the passion is reciprocated—when the heart of the beloved yields back thought for thought, and throb for throb, without one reserved pulsation. This is bliss upon earth—not always long-lived—ending perchance in a species of sublimated friendship. To have is no longer to desire.

The second is love entirely unrequited—love that never knew word or smile of encouragement, no soft whisper to fan it into flame, no ray of hope to feed upon. Such dies of inanition, the sooner that its object is out of the way, and absence will conquer it in time.

The third is the love that 'dotes yet doubts,' that doubts but never dies—no, never. The jealousy that pains, only sustains it; it lives on, now happy in the honeyed conviction of triumph, now smarting under real or fancied scorn—on, on, so long as its object is accessible to sight or hearing! No matter how worthless that object may be or become—no matter how lost or fallen: love regards not this. It has nought to do with the moral part of our nature. Beauty is the shrine of its worship, and beauty is not morality.

In my own mind, I am conscious of three elements or classes of feeling: the *moral*, the *intellectual*, and what I may term the *passional*—the last as distinct from either of the other two as oil from spirits or water. To the last belongs love, which, I repeat again, has no sympathy with the moral feelings of our nature, but, alas! as one might almost believe, with their opposite. Even a plain but wicked coquette will captivate more hearts than a beautiful saint, and the brilliant murderess, ere now, has made conquests at the very foot of the scaffold!

It pains me to pronounce these convictions, derived as they are from experience. There is as little gain as pleasure in so doing, but popularity must be sacrificed at the shrine of truth. For the sake of effect, I shall not play false with philosophy.

Rough ranger as I was, I had studied psychology sufficiently to understand these truths; and I endeavoured

to analyse my passion for this girl or woman—to discover *why* I loved her. Her physical beauty was of the highest order, and that no doubt was an element; but it was not all. Had I merely looked upon this beauty under ordinary circumstances—that is, without coming in contact with the spirit that animated it—I might have loved her, or I might not. It was the spirit, then, that had won me, though not alone. The same gem in a less brilliant setting might have failed to draw my admiration. I was the captive both of the spirit and the form. Soul and body had co-operated in producing my passion, and this may account for its suddenness and profundity. Why I loved her person, I knew—I was not ignorant of the laws of beauty—but why the spirit, I knew not. Certainly not from any idea I had formed of her high moral qualities; I had no evidence of these. Of her courage, even to daring, I had proof; of energy and determined will; of the power of thought, quick and versatile; but these are not *moral* qualities, they are not even *feminine*! True, she wept over her slain steed. Humanity? I have known a hardened *lorette* weep bitter tears for her tortoise-shell cat. She refused to take from me my horse. Generosity? She had a thousand within sight. Alas! in thus reviewing all that had passed between myself and the beautiful Isolina, in search of her moral qualities, I met with but little success!

Mystery of our nature! I loved her not the less! And yet my passion was pure, and I do not believe that my heart was wicked. Mystery of our nature! He who reads all hearts alone can solve thee!

I loved without reason; but I loved now without hope. Hope I had before that night. Her glance through the turrets—her note—its contents—a word or two at other times, had inspired me with hopes, however faint they were. The incident in the ball-room had crushed them.

Ijorra's dark face kept lowering before me; even in my visions he was always by her side. What was between the two? Perhaps a nearer relationship than that of cousin? Perhaps they were affianced? Married?

The thought maddened me.

I could rest upon my couch no longer. I rose and sought the open air; I climbed to the azotea, and paced it to and fro, as the tiger walks his cage. My thoughts were wild, and my movements without method. To add to the bitterness of my reflections, I now discovered that I had sustained a loss—not in property, but something that annoyed me still more. I had lost the order and its enclosure—the note of Don Ramon. I had dropped them on the day in which they were received, and I believed in the patio of the hacienda, where they must have been picked up at once. If by Don Ramon himself, then all was well; but if they had fallen into the hands of some of the leathern-clad herdsmen, ill affected to Don Ramon, it might be an awkward affair for that gentleman—indeed for myself. Such negligence would scarcely be overlooked at head-quarters; and, I had ill-forebodings about the result. It was one of my soul's darkest hours.

From its very darkness I might have known that light was near, for the proverb is equally true in the moral as in the material world. Light was near.

CHAPTER XV.

AN ODD EPISTLE.

Breakfast I hardly tasted. A *taso* of chocolate and a small sugared cake—the *desayuna* of every Mexican—were brought, and these served me for breakfast. A glass of cognac and a Havanna were more to the purpose, and helped to stay the wild trembling of my nerves. Fortunately, there was no duty to perform, else I could ill have attended to it. I remained on the

azotea till near mid-day. The storm raging within prevented me from taking note of what was passing around. The scenes in the plaza, the rangers and their steeds, the 'greasers' in their striped blankets, the *Indians* squatted on their *petates*, the pretty *poblanas*, were all unnoticed by me. At intervals, my eyes rested upon the walls of the distant dwelling; it was not so distant but that a human form could have been distinguished upon its roof, had one been there. There was none, and twenty, ay, fifty times, did I turn away my disappointed gaze.

About noon, the sergeant of the guard reported that a Mexican wished to speak with me: mechanically, I gave orders for the man to be sent up; but it was not until he appeared before me that I thought of what I was doing.

The presence of the Mexican at once roused me from my unpleasant reverie. I recognised him as one of the *vaqueros* of Don Ramon de Vargas—the same I had seen on the plain during my first interview with Isolina.

There was something in his manner that betokened him a messenger. A folded note, which he drew from under his jerkin—after having glanced around to see whether he was noticed—confirmed my observation.

I took the note. There was no superscription, nor did I stay to look for one. My fingers trembled as I tore open the seal. As my eye rested on the writing and recognised it, my heart throbbled so as almost to choke my utterance. I muttered some directions to the messenger; and to conceal my emotion from him, I turned away and proceeded to the furthest corner of the azotea before reading the note. I called back to the man to go below, and wait for an answer; and, then relieved of his presence, I read as follows:

July 18—.

'Gallant capitan! allow me to bid you a *buenas dias*, for I presume that, after the fatigues of last night, it is but morning with you yet. Did you dream of your sable belle? "Poor devil!" Ha, ha, ha! Gallant capitan!'

I was provoked at this mode of address, for the 'gallant' was rendered emphatic by underlining. It was a letter to taunt me for my ill behaviour. I felt inclined to fling it down, but my eye wandering over the paper, caught some words that induced me to read on.

'Gallant capitan! I had a favourite mare. How fond I was of that creature you may understand, who are afflicted by a similar affection for the noble Moro. In an evil hour, your aim, too true, alas! robbed me of my favourite, but you offered to repay me by *robbing* yourself, for well know I that the black is to you the *dearest object upon earth*. Indeed, were I the lady of your love, I should ill brook such a divided affection! Well, mio capitan, I understood the generous sacrifice you would have made, and forbade it; but I know you are desirous of cancelling your debt. It is in your power to do so. Listen!'

Some *hard* conditions I anticipated would follow; I recked not of that. There was no sacrifice I was not ready to make. I would have dared any deed, however wild, to have won that proud heart, to have inoculated it with the pain that was wringing my own. I read on:

'There is a horse, famed in these parts as the "white steed of the prairies" (*el caballo blanco de los llanos*). He is a wild-horse, of course; snow-white in colour, beautiful in form, swift as the swallow— But why need I describe to you the "white steed of the prairies?" you are a Tejano, and must have heard of him ere this? Well, mio capitan, I have long had a desire—a frantic one, let me add—to possess this horse. I have offered rewards to hunters—to our own *vaqueros*, for he sometimes appears upon our plains—but to no purpose. Not one of them can capture,

though they have often seen and chased him. Some say that he *cannot* be taken, that he is so fleet as to gallop, or rather *glide* out of sight in a glance, and that, too, on the open prairie! There are those who assert that he is a phantom, *un demonio*! Surely so beautiful a creature cannot be the devil? Besides, I have always heard—and, if I recollect aright, some one said so last night—that the devil was *black*. "Poor devil!" Ha, ha, ha!'

I rather welcomed this allusion to my misconduct of the preceding night, for I began to feel easier under the perception that the whole affair was thus treated in jest, instead of the anger and scorn I had anticipated. With pleasanter presentiments I read on:

'To the point, mio capitan. There are some incredulous people who believe the white steed of the prairies to be a myth, and deny his existence altogether. *Carrambo!* I know that he *does* exist, and, what is more to my present purpose, he is—or *was*, but two hours ago—within ten miles of where I am writing this note! One of our *vaqueros* saw him near the banks of a beautiful *arroyo* river, which I know to be his favourite ground. For reasons known to me, the *vaquero* did not either chase or molest him; but in breathless haste brought me the news.

'Now, capitan, gallant and grand! there is but one who can capture this famed horse, and that is your puissant self. Ah! *you have made captive what was once as wild and free*. Yes! you can do it—you and Moro!

'Bring me the white steed of the prairies! I shall cease to grieve for poor Lola. I shall forgive you that *contratiempo*. I shall forgive all—even your rudeness to my double mask. Ha, ha, ha! Bring me the white steed! the white steed! ISOLINA.'

As I finished reading this singular epistle, a thrill of pleasure ran through my veins. I dwelt not on the oddness of its contents, thoroughly characteristic of the writer. Its meaning was clear enough.

I had heard of the white horse of the prairies—what hunter or trapper, trader or traveller, throughout all the wide borders of prairie-land, has not? Many a romantic story of him had I listened to around the blazing camp-fire—many a tale of German-like *diablerie*, in which the white horse played hero. For nearly a century has he figured in the legends of the prairie 'mariner'—a counterpart to the Flying Dutchman—the 'phantom-ship' of the fore-castle. Like this, too, ubiquitous—seen to-day scouring the sandy plains of the Platte, to-morrow bounding over the broad llanos of Texas, a thousand miles to the southward!

That there existed a white stallion of great speed and splendid proportions—that there were twenty, perhaps a hundred such—among the countless herds of wild-horses that roam over the great plains, I did not for a moment doubt. I myself had seen and chased more than one that might have been termed 'a magnificent animal,' and that no ordinary horse could overtake; but the one known as the 'white steed of the prairies' had a peculiar marking, that distinguished him from all the rest—his ears were *black*!—only his ears, and these were of the deep colour of ebony. The rest of his body, mane and tail, was white as fresh-fallen snow.

It was to this singular and mysterious animal that the letter pointed; it was the black-eared steed I was called upon to capture. The contents of the note were specific and plain. One expression alone puzzled me: '*You have made captive what was once as wild and free*.' What? I asked myself. I scarce dared to give credence to the answer that leaped like an exulting echo from out my heart!

There was a postscript, of course; but this contained only 'business.' It gave minuter details as to when, how, and where the white horse had been seen, and

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stated that the bearer of the note—the vaquero who had seen him—would act as my guide.

I pondered not long upon the strange request. Its fulfilment promised to recover me the position, which but a moment before I had looked upon as lost for ever. I at once resolved upon the undertaking.

'Yes, lovely Isolina! if horse and man can do it, ere another sun sets, you shall be mistress of the white steed of the prairies!'

CHAPTER XVI.

THE MANADA.

In half an hour after, with the vaquero for my guide, I rode quietly out of the rancheria. A dozen rangers followed close behind; and having crossed the river at a ford nearly opposite the village, we struck off into the chapparal on the opposite side.

The men whom I had chosen to accompany me were all old hunters, fellows who could 'trail' and 'crease' with accurate aim. I had confidence in their skill, and, aided by them, I had great hopes we should find the game we were in search of. My hopes, however, would not have been so sanguine but for another circumstance. It was this: Our guide had informed me, that when he saw the white steed, the latter was in company with a large drove of mares—a *manada*—doubtless his harem. He would not be likely to separate from them, and even if these had since left the ground, they could be the more easily 'trailed,' in consequence of their numbers. Indeed, but for this prospect, our wild-horse hunt would have partaken largely of the character of a 'wild-geese chase.' The steed, by all accounts of him, might have been seen upon one arroyo to-day, and by the banks of some other stream, a hundred miles off, on the morrow. The presence of his manada offered some guarantee, that he might still be near the ground where the vaquero had marked him. Once found, I trusted to the swiftness of my horse, and my own skill in the use of the lazo.

As we rode along, I revealed to my following the purpose of the expedition. All of them knew the white steed by fame; one or two averred they had seen him in their prairie wanderings. The whole party were delighted at the idea of such a 'scout,' and exhibited as much excitement as if I was leading them to a skirmish with guerilleros!

The country through which we passed was at first a dense chapparal, consisting of the various thorny shrubs and plants for which this part of Mexico is so celebrated. The greater proportion belonged to the family of *leguminosæ*—*robinias*, *gleditschias*, and the Texan acacias of more than one species, there known as *mezquite*. Aloes, too, formed part of the undergrowth, to the no small annoyance of the traveller—the wild species known as the *lechuguilla*, or pita-plant, whose core is cooked for food, whose fibrous leaves serve for the manufacture of thread, cordage, or cloth—while its sap yields by distillation the fiery *mezcal*. Here and there, a tree yucca grew by the way, its fascicles of rigid leaves reminding one of the plumed heads of Indian warriors. Some I saw with edible fruits growing in clusters, like bunches of bananas. Several species are there of these fruit-bearing yuccas in the region of the Rio Grande, as yet unknown to the scientific botanist. I observed also the *palmilla*, or soap-plant, another yucca whose roots yield an excellent substitute for soap; and various forms of cactus—never out of sight on Mexican soil—grew thickly around, a characteristic feature of the landscape. Plants of humbler stature covered the surface, among which the syngenesists predominated; while the fetid *artemisia*, and the still more disagreeably odorous creosote plant (*Larrea Mexicana*), grew upon spots that were sandy and arid. Plesanter objects to the eye were the scarlet panicles of the

Fouquiera splendens, then undescribed by botanists, and yet to become a favourite of the arboretums. I was in no mood for botanising at the time, but I well remember how I admired this elegant species—its tall culm-like stems, surmounted by panicles of brilliant flowers, rising high above the level of the surrounding thicket, like banners above a host. Not that I possess the refined taste of a lover of flowers, and much less then; but could must be the heart that could look upon the floral beauty of Mexico without remembering some portion of its charms. Even the *rustest* of my followers could not otherwise than admire; and once or twice, as we journeyed along, I could hear them give utterance to that fine epithet of the heart's desire, 'Beautiful!'

As we advanced, the aspect changed. The surface became freer of jungle; a succession of glade and thicket; in short, a 'mezquite prairie.' Still advancing, the 'openings' became larger, while the timbered surface diminished in extent, and now and then the glades joined each other without interruption.

We had ridden nearly ten miles without drawing bridle, when our guide struck upon the trail of the manada. Several of the old hunters, without dismounting, pronounced the tracks to be those of wild mares, which they easily distinguished from horse tracks. Their judgment proved correct; for following the trail but a short distance further, we came full in sight of the drove, which the vaquero confidently pronounced was the manada we were in search of!

So far our success equalled our expectations; but to get sight of a *caballada* of wild-horses, and to capture its swiftest steed, are two things of very unequal difficulty. This fact my anxiously beating heart and quickly throbbing pulse revealed to me at the moment. It would be difficult to describe the mingled feelings of anxious doubt and joyous hope that passed through my mind, as from afar off I gazed upon that shy herd, still unconscious of our approach.

The prairie upon which the mares were browsing was more than a mile in width, and, like those we had been passing through, it was surrounded by the low chapparal forest, although there were avenues that communicated with other openings of a similar kind. Near its centre was the manada. Some of the mares were quietly browsing upon the grass, while others were frisking and playing about, now rearing up as if in combat, now rushing in wild gallop, their tossed manes and full tails flung loosely upon the wind. Even in the distance we could trace the full rounded development of their bodies, and their smooth coats, glistening under the sun, denoted their fair condition. They were of all colours known to the horse, for in this the race of the Spanish horse is somewhat peculiar. There were bays, and blacks, and whites—the last being most numerous. There were grays, both iron and roan, and duns with white manes and tails, and some of a mole colour, and not a few of the kind known in Mexico as *pintados* (piebalds)—for spotted horses are not uncommon among the mustangs—all of course with full manes and tails, since the mutilating shears of the jockey had never curtailed their flowing glories.

But where was the lord of this splendid harem?—where the steed? This was the thought that was uppermost in the mind of all, the question upon every tongue. Our eyes wandered over the herd, now here, now there. White horses there were, numbers of them, but it needed but a glance to tell that the 'steed of the prairies' was not there.

We eyed each other with looks of disappointment. Even my companions felt that; but a far more bitter feeling was growing upon me as I gazed upon the leaderless troop. Could I have captured and carried back the whole drove, the present would not have purchased one smile from Isolina. The steed was not among them!

He might still be in the neighbourhood; or had he

forsaken the manada altogether, and gone far away over the wide prairie in search of new conquests? The vaquero believed he was not far off. I had faith in this man's opinion, who, having passed his life in the observation of wild and half-wild horses, had a perfect knowledge of their habits. There was hope then. The steed might be near; perhaps lying down in the shade of the thicket; perhaps with a portion of the manada or some favourite in one of the adjacent glades. If so, our guide assured us we should soon have him in view. He would soon bring the steed upon the ground.

How? Simply by startling the mares, whose neigh of alarm would be heard from afar.

The plan seemed feasible enough; but it was advisable that we should surround the manada before attempting to disturb them, else they might gallop off in the opposite direction before any of us could get near. Without delay, we proceeded to effect the 'surround.'

The chapparal aided us by concealing our movements; and in half an hour we had deployed around the prairie.

The drove still browsed and played. They had no suspicion that a cordon of hunters was being formed around them, else they would have long since galloped away. Of all wild creatures, the shiest is the wild-horse; the deer, the antelope, and buffalo are far less fearful of the approach of man. The mustang seems to understand the doom that awaits him in captivity. One could almost fancy that the runaways from the settlements—occasionally seen amongst them—had poured into their ears the tale of their hardship and long endurance.

I had myself ridden to the opposite side of the prairie, in order to be certain when the circle was complete. I was now alone, having dropped my companions at intervals along the margin of the timber. I had brought with me the bugle, with a note or two of which I intended to give the alarm to the mares. I had placed myself in a clump of mezquite trees, and was about raising the horn to my lips, when a shrill scream from behind caused me to bring down the instrument, and turn suddenly in my seat. For a moment, I was in doubt as to what could have produced such a singular utterance, when a second time it fell on my ear, and I then recognised it. It was the neigh of the prairie stallion!

Near me was a break in the thicket, a sort of avenue leading out into another prairie. In this I could hear the hoof-stroke of a horse going at a gallop. As fast as the underwood would allow, I pressed forward and came out upon the edge of the open ground; but the sun, low down, flashed in my eyes, and I could see no object distinctly. The tread of the hoofs and the shrill neighing still rang in my ears. Presently, the dazzling light no longer quite blinded me; I shaded my eyes with my hand, and could perceive the form of a noble steed stretching in full gallop down the avenue, and coming in the direction of the manada. Half-a-dozen springs brought him opposite; the beam was no longer in my eyes; and as he galloped past, I saw before me the 'white steed of the prairies.' There was no mistaking the marks of that splendid creature: there was the snow-white body, the ears of jetty blackness, the blue muzzle, the red projected nostril, the broad oval quarters, the rounded and symmetric limbs—all the points of an incomparable steed!

Like an arrow, he shot past. He did not arrest his pace for an instant, but galloped on in a direct line for the drove.

The mares had answered his first signal with a responsive neigh; and tossing up their heads, the whole manada was instantly in motion. In a few seconds, they stood at rest again, *formed in line*—as exact as could have been done by a troop of cavalry—

and fronted their leader as he galloped up. Indeed, standing as they were, with their heads high in air, it was easy to fancy them mounted men in the array of battle; and often have the wild-horses been mistaken for such by the prairie traveller!

Concealment or stratagem could no longer avail; the chase was fairly up. Speed and the lazo must now decide the result; and with this conviction, I gave Moro the spur, and bounded into the open plain. The neighing of the steed had signaled my companions, who shot almost simultaneously out of the timber, and spurred towards the drove, yelling as they came.

I had no eyes for aught but the white steed, and after him I directed myself. On nearing the line of mares, he halted in his wild gallop, twice reared his body upward, as if to reconnoitre the ground; and then, uttering another of his shrill screams, broke off in a direct line towards the edge of the prairie. A wide avenue leading out in that direction seemed to have guided his instincts. The manada followed, at first galloping in line; but this was soon broken, as the swifter individuals passed ahead of the others, and the drove became strung out upon the prairie.

Through the opening now swept the chase—the pursuers keenly plying the spur, the pursued straining every muscle to escape.

CHAPTER XVII.

THE HUNT OF THE WILD-HORSE.

My gallant horse soon gave proof of his superior qualities. One after another of my companions was passed; and as we cleared the avenue and entered a second prairie, I found myself mixing with the hindmost of the wild mares. Pretty creatures some of them were; and upon any other occasion, I should have been tempted to fling a lazo over one of them, which I might easily have done. Then I only thought of getting them out of the way, as they were hindering my onward gallop. Before we had quite crossed the second prairie, I had forged into the front rank, and the mares, seeing I had headed them, broke to the right and left, and scattered away. All were now behind me, all but the white steed; he alone kept the course, at intervals uttering that same shrill neigh, as if to tantalise and lure me on. He was yet far in advance, and apparently running *at his ease*!

The horse I bestrode needed neither spur nor guidance; he saw before him the object of the chase, and he divined the will of his rider. I felt him rising under me like a sea-wave. His hoofs struck the turf without impinging upon it. At each fresh spring, he came up with elastic rebound, while his flanks heaved with the conscious possession of power.

Before the second prairie was crossed, he had gained considerably upon the white steed; but to my chagrin, I now saw the latter dash right into the thicket.

I found a path, and followed. My ear served to guide me, for the branches crackled as the wild-horse broke through. Now and then I caught glimpses of his white body, glancing among the green leaves.

Apprehensive of losing him, I rode recklessly after, now breasting the thicket, now tracing its labyrinthine aisles. I heeded not the thorny mimosas; my horse heeded them not; but large trees of the false acacia (*robinia*) stood thickly in the way, and their horizontal branches hindered me. Often was I obliged to bend flat to the saddle, in order to pass under them. All this was in favour of the pursued, and against the pursuer.

I longed for the open prairie, and to my relief it at length appeared, not yet quite treeless, but studded with timber 'islands.' Amid these the white steed was sailing off; but in passing through the thicket, he had gained ground, and was now a long way in advance of me. He was making for the open plain that lay

beyond, and this shewed that it was his habit to trust to his heels for safety. Perhaps, with such a pursuer, he would have been safer to have kept the chapparral; but that remained to be seen.

In ten minutes' time, we had passed through the timber islands, and now the prairie—the grand, limitless prairie—stretched before us, far beyond the reach of vision.

On goes the chase over its grassy level—on till the trees are no longer behind us, and the eye sees nought but the green savannah, and the blue canopy arching over it—on, across the centre of that vast circle which has for its boundary the whole horizon!

The rangers, lost in the mazes of the chapparral, have long since fallen off; the mustangs have gone back; on all that wide plain, but two objects appear—the snow-white form of the flying steed, and the dark horseman that follows!

It is a long wild ride, a cruel gallop for my matchless Moro. Ten miles of the prairie have we passed—more than that—and as yet I have neither used whip nor spur. The brave steed needs no such prompting; he, too, has his interest in the chase—the ambition not to be outrun. My motive is different: I think only of the smiles of a woman; but such motive ere now has led to the loss of a crown or the conquest of a world. On, Moro! on! you must overtake him or die!

There is no longer an obstacle. He cannot hide from us here. The plain, with its sward of short grass, is level and smooth as the sleeping ocean; not an object intrudes upon the sight. He cannot conceal himself anywhere. There is still an hour of sunlight; he cannot hide from us in the darkness: ere that comes down, he shall be our captive. On, Moro! on!

On we glide in silence. The steed has ceased to utter his taunting neigh; he has lost confidence in his speed; he now runs in dread. Never before has he been so sorely pressed. He runs in silence, and so, too, his pursuer. Not a sound is heard but the stroke of the galloping hoofs—an impressive silence, that betokens the earnestness of the chase.

Less than two hundred yards separate us; I feel certain of victory. A touch of the spur would now bring Moro within range; it is time to put an end to this desperate ride. Now, brave Moro, another stretch, and you shall have rest!

I look to my lazo; it hangs coiled over the horn of my saddle: one end is fast to a ring and staple firmly riveted in the tree-wood. Is the loop clear and free? It is. The coil—is it straight? Yes; all as it should be.

I lift the coil, and rest it lightly over my bridle arm; I separate the noose, and hold it in my right hand. I am ready—*God of Heaven! the steed?*

It was a wild exclamation, but it was drawn from me by no common cause. In arranging my lazo, I had taken my eyes from the chase, only for a moment: when I looked out again, *the horse had disappeared!*

With a mechanical movement I drew bridle, almost wrenching my horse upon his haunches; indeed, the animal had half halted of his own accord, and with a low whimper seemed to express terror. What could it mean? Where was the wild-horse?

I wheeled round, and round again, scanning the prairie on every side—though a single glance might have served. The plain, as already described, was level as a table; the horizon bounded the view: there was neither rock nor tree, nor bush nor weeds, nor even long grass. The sward was of the kind known upon the prairies as 'buffalo-grass' (*Sesleria dactyloides*), short when full grown, but then rising scarcely two inches above the soil. A serpent could hardly have found concealment under it, but a horse—*Merciful heaven! where was the steed?*

An indefinable feeling of awe crept over me: I trembled; I felt my horse trembling between my thighs. He was covered with foam and sweat; so was I—the effects of the hard ride: but the cold perspiration of terror was fast coming upon me. The mystery was heavy and appalling!

THE MONTH:

SCIENCE AND ARTS.

From certain experiments recently made by Mr W. R. Grove, whose name is associated with the best of galvanic batteries, the way appears to be opening for new applications of electricity, and for investigations rich in promise alike to science and art. It was known years ago to some of the German savans, that a coin or medal placed on a smooth vitreous or metallic surface and electrised, would leave impressions on that surface which became visible when breathed on. From the latter peculiarity they were called 'oric figures;' and attempts were made to fix them by exposure to vapour of mercury or iodine, but without success. Where the Germans failed, Mr Grove has succeeded: 'believing, as I have for many years,' he says, 'that electricity is nothing else than motion or change in matter, a force and not a fluid, I have made experiments to ascertain whether similar effects take place in cases where electrical light is visible upon insulated surfaces only.'

We give a brief sketch of the experiments, adopting Mr Grove's description where it suits our purpose. Two plates of window-glass, about three inches square, were dipped in nitric acid, then washed, and dried with a clean silk handkerchief, and coated on the outside with pieces of tinfoil a little smaller than the glass. A piece of a printed hand-bill was laid between the plates thus prepared; the tinfoil coatings were connected with the secondary terminals of a Ruhmkorff's coil, and removed after a few minutes' electrification. Now, 'the interior surface of the glass when breathed on, shewed with great beauty the printed words which had been opposite it, these appearing as though etched on the glass, or having a frosted appearance; even the fibres of the paper were beautifully brought out by the breath, but nothing beyond the margin of the tinfoil.' These impressions were fixed by holding them over hydrofluoric acid—powdered fluor spar and sulphuric acid slightly warmed in a leaden dish.

'I now cut out of thin white letter-paper,' proceeds Mr Grove, 'the word VOLTA, and placed it between the plates of glass. They were submitted to electrification as before, and the interior surface of one of them, without the paper letters, was subsequently exposed in the hydrofluoric acid vapour; the previously invisible figures came out perfectly, and formed a permanent and perfectly accurate etching of the word VOLTA, as complete as if it had been done in the usual mode by an etching ground. This, of course, could be washed and rubbed to any extent without alteration; and the results I have obtained give every promise for those who may pursue this as an art, of producing very beautiful effects, enabling Silhouette designs, or even fine engravings, to be copied on glass, &c.'

We cite yet another experiment, as it brings photography into play. A plate on which the invisible image was impressed, was immersed in a bath of nitrate of silver, in the usual manner as for a photograph. 'It was then held opposite a window for a few seconds, and taken back into the darkened room; and on pouring over it a solution of pyrogallie acid, the word VOLTA, and the border of the glass beyond the limits of the tinfoil, were darkened, and came out with perfect distinctness, the other parts of the glass having been, as it were, protected by electrification from the action of light. The figures were permanently fixed

by a strong solution of hyposulphate of soda.'—Mr Grove has published an account of his various experiments in the *Philosophical Magazine*.

Professor Hansen of Seeberg, one of the foreign members of the Royal Society, and a renowned astronomer, has recently completed a series of elaborate calculations based on observations of the moon, which clear away some of the difficulties of the question as regards our satellite. His published results are for the most part abstruse and technical—appreciable only by astronomers: but among them occur certain matters of popular interest. He finds, for example, that the moon's centre of gravity is 59,000 metres (about forty miles) from the centre of its mass, a difference sufficiently great to produce an effect. 'Hence,' he argues, 'we ought to consider the two hemispheres of the moon, of which one is visible and the other invisible for us, as essentially different with regard to their levels, their climates, and all that depends thereon. Seeing that the lines of level regulate themselves principally with reference to the centre of gravity, the hemisphere of the moon turned towards us, rises much more beyond the mean level than the opposite hemisphere; and although the former presents itself to us as a sterile region, void of atmosphere, and of animal life, we cannot conclude it the same for the latter. The mean level should prevail round the edge, as seen by us; and in truth we cannot say but that some traces of atmosphere do shew themselves.'

A paper 'On the Laws of the Strength of Wrought and Cast Iron,' by Mr W. Bell, has been read before the Institution of Civil Engineers. The subject is one eminently interesting to the profession. The author has taken all the trustworthy experiments hitherto made, and comparing them with each other, deduces certain laws conformable with the prevalent theory. The phenomena of tension, compression, and breakage of the several kinds of iron are examined and discussed, and exemplified by mathematical formulæ. Mr Bell considers the opinion, that in an overstrained and breaking beam 'the neutral axis is at or above the top of the beam,' to be erroneous, and cites as evidence some of Sir David Brewster's experiments in passing polarised light through a piece of glass subjected to transverse strain. Here we see optics brought to bear in a question of mechanics. Leaving aside the dry and difficult technicalities, we give the propositions established by the paper. '1. That in experiments where the materials are but slightly strained, theory and experiment coincide; 2. That where the ordinary theory applies to the rupture of beams, and especially large beams of wrought iron, theory and experiment practically coincide; and last, that the ordinary theory of the strength of materials is more trustworthy than is generally supposed.' The subject is one of first-rate importance. A somewhat similar paper 'On the Strength of Iron Pillars,' has been read before the Royal Society by Mr Eaton Hodgkinson, giving the results of a long series of experiments made with his usual care. The cost of these experiments has been defrayed by a portion of the Royal Society's government grant, and the liberality of Mr Robert Stephenson.

Mr Basford's new method of purifying gas is attracting notice; instead of lime, he uses charcoal saturated at red-heat with lime-water, by which all the sulphur and ammonia are effectually stopped, while, as we hear, the quantity of gas obtained per ton of coal is all but doubled. On the continent, great improvements have been made in the manufacture of gas from wood: at Zurich, Heilbronn, Munich, and other places, it is largely used; and, according to report, five feet of wood-gas give as much light as six feet of coal-gas.—Extensive beds of clay, rich in aluminum, have been discovered in the state of New Jersey, United States, where our enterprising cousins will doubtless turn them to profit.—So much has the process of extracting

the aluminum been simplified, that two kilogrammes of the metal are produced every day at a laboratory in the Rue St Jacques, Paris, at a cost of not more than 300 francs the kilogramme. The eagles on the standards of the French army are now made of aluminum, and with a considerable saving in the weight to be carried.—Chevreul has communicated to the Académie a paper setting forth researches made by him on certain ancient bronze statuettes brought from Egypt. We take one example. He placed a small completely oxidated effigy of Anubis in a porcelain tube, filled the tube with hydrogen gas, and raised it to a dull red heat. Presently, water, coloured green, was seen to condense in the bell-glass, and after letting the apparatus cool, 'I took out the statuette,' he says, 'completely revived. I place it before the eyes of the Académie, together with the water and chlorhydric acid which represent the oxygen and chlorine of Egypt, now transformed at Paris by hydrogen into water and acid.' This reminds us of the admirably ingenious restoration of the Ninevite ivories by boiling them in gelatine, as suggested by Professor Owen.

A species of concrete (*béton*) in which ashes are a principal ingredient, has of late been advantageously introduced for building purposes in Paris. We have heard of a manufacturing firm who utilise most of their waste in the working up of this new material. So rapidly has this artificial stone been improved, that slabs for floors are now made seven metres long by six metres wide, which, being laid all in one piece, no beams or vaulting are necessary underneath. M. Coignet states: 'I fabricate in *bétons agglomérés*, as hard as the best stone, all the parts of a house—cellars, drains, paving-flags, sinks, walls, floors, roofs, exterior ornaments, without using wood or brick. By this process, the house, however large it may be, is a monolith; and this monolith equals, at least in solidity, masonry of hewn stone, and costs much less than the coarsest building in rubble.'

There is talk of adopting at Paris the process in use at Leicester for deodorising and utilising the sewage. The contents of the sewers being discharged into reservoirs, the solid matters are precipitated by means of lime, the water flows off clear, and the mud raised by an Archimedean screw, is dried in a centrifugal machine, and sold for manure in the form of bricks. A manufactory of *poudrette* has long existed at Paris, and it is believed that a handsome revenue may be derived from works on a larger scale, and a source of insalubrity at the same time neutralised.—Near Marseille, as we hear, an improved hydraulic-ram, beating on a cushion of water instead of a block of iron, has been found of great service in agricultural operations.

The selection of Professor William Thomson of Glasgow as one of the directors in the Atlantic Telegraph Company, is regarded as a satisfactory proof that the best scientific resources will be made available in the great submarine undertaking. In two short papers read before the Royal Society, the professor has thrown out new views on electro-telegraphy at long distances, developing a theory of signalling by pulsations. It is ingenious; but there remains to be seen how it will bear the test of practice.—At the meeting of German naturalists at Vienna last September, Gintl shewed that one telegraphic circuit will affect another which may happen to be near it, though the latter be altogether unconnected with the battery. Pass a current through the first, and the second, as demonstrated by the galvanometer, is visibly affected—in some as yet unexplained way through the earth. The cause will probably be discovered; meantime, the fact accounts for the confusion that sometimes arises in a net-work of telegraph lines, and suggests a means of simplification.

The dispute between Switzerland and Prussia has

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given another opportunity for testing the merits of a portable military telegraph, invented by M. Hipp, chief of the federal telegraph construction department—a remarkably effective yet simple instrument. It prints after the manner of Morse's; but the armature is regulated by a single spring only, worked by pressing a small knob. Attached to any line of wire, messages can be received and transmitted, and indeed all the usual operations of telegraphy carried on as with fixed instruments. It, however, weighs no more than twelve pounds complete with its case, which measures ten inches in length, and five inches in breadth and height. Within this small space it contains the transmitting apparatus, a supply of paper, the tools necessary for mounting and dismounting the instrument, an alarm which may be brought into the circuit at pleasure, two drawers holding troughs of gutta-percha of twelve compartments each, furnished with a pile of charcoal and amalgamated zinc. When moistened with dilute sulphuric acid, the action is complete, and little liable to disturbance: an instrument sent from Berne to Paris by diligence and railway, was quite fit for use on arrival.

Among the meteorological phenomena which occurred during December, there fell at Ambleside five inches of rain in twenty-nine hours on the 7th and 8th, whereby a sudden flood was produced in the valleys.—M. de Tesson says in a communication to the Société Philomatique, that fogs, clouds, mists, &c., are not vesicular vapours—in which opinion he is not alone—and that a true study of these appearances would clear up some doubtful points in meteorology.—The Abbé Raillard has laid a paper before the Académie on the same subject. He denies the truth of the vesicular vapour theory concerning clouds, and contends that the phenomenon in question depends on minute division. As gold, when beaten into leaf, falls slowly, so the more the surfaces of water are increased, the more slowly will the water fall. The resistance of air to a drop divided into a thousand parts, is a thousand times greater than to a single drop. Hence clouds are borne up by the friction of the atmosphere. That clouds should consist of vesicular vapour is, in the abbé's opinion, simply impossible: for if it were vesicular, it would be condensed; and if air were contained within the vesicles, the viscosity of the husk or shell would have to be something very different from that of water. This is a subject of especial interest to meteorologists, many of whom entertain similar views; and considering the activity which now prevails in their branch of study, we may look for important advances towards establishing it as a science.

The great oceanic survey, which we have from time to time mentioned, is making satisfactory progress. Reports with tabular details have already been received from some of the ships employed, and these will be discussed and the results brought out under the superintendence of Captain R. Fitzroy, Marine Department of the Board of Trade. The work of this survey, as will be remembered, was begun by the United States government; and our Admiralty now undertake a class of observations not embraced by the Americans, and highly beneficial consequences are hoped for from this co-operation of the two nations.—Lieutenant Maury recommends that the routes for ships crossing the Atlantic should be set off into what he calls 'lanes,' or pathways some twenty-five miles wide, one to be used by steamers going, the other by steamers returning—following the law of the road to prevent collisions. The breadth of the route travelled by the Cunard steamers is 300 miles; and it is clear that a lane fifty miles wide might be followed on either margin, and the risk of vessels meeting entirely avoided.

For some years, tide-observations have been made round the coasts of Ireland, for the purpose of

discovering the various phenomena connected with the tides, currents, &c., and so facilitating navigation. Among the results obtained, there is one which at the first glance appears all but impossible. The Rev. Professor Haughton, of the Royal Irish Academy, has been enabled, by ingenious calculations based on those tide-observations, to infer the depth of the ocean. One of his conclusions, omitting fractions, is eleven miles; the other, five miles. The first is the depth of the vast central channel up which the great tidal wave rolls from the antarctic pole; the second is the mean depth of the whole Atlantic Ocean. We noticed some time ago a deep-sea sounding of seven miles, taken in the South Atlantic: this favours the professor's theory, and we shall perhaps learn, from the surveys and explorations now in progress, whether the deepest places have yet been sounded.

GOING TO THE PLAY IN CHINA.*

At the end of the street or alley we now entered, we observed a vast court surrounded with scaffoldings crowded with people, and at the further end, on a stage, the actors were to perform their parts—the river, forming the harbour of Canton, and its countless vessels, being the background of the picture.

To think of forcing our way through the crowd which encumbered the pit (the court), was perfectly useless; but thanks to the eloquence of M—, we entered a house, through which we were allowed to pass, on payment of half a *gourde* each; and in this manner succeeded in gaining one of the scaffoldings which was on a level with the first story of the house. Here we found several rows of benches, ranged one above the other, and selecting one of the highest, for the purpose of commanding a better view, we quietly took our seats.

The arrangement of the theatre was as follows:—An oblong enclosure was shut in on both sides by the boxes—covered galleries erected on wooden stakes—and here were assembled all those who paid for their admission. The stage, likewise supported on pillars, and covered, not with matting, like the gallery, but with painted cloth, formed one of the small corners of the right angle, and extended to the edge of the water; finally, a wall which joined the house through which we had entered, to another house opposite, completed the enclosure of the vast space, leaving only one door open for the crowd, who occupied the pit gratis.

At the moment of our arrival, a clever mountebank belonging to the *troupe* was filling up the pause between the acts by passing his body through the rounds of a ladder, jumping backwards over chairs, &c. As this was not a very exciting spectacle, I bestowed all my attention on the assembly among whom we now found ourselves, and wherein we were the only Europeans. I remarked, first of all, that among all those grave Chinese heads, surmounted by black leather caps or conical hats, were some really pretty women, whose *coiffures* were ornamented with flowers and gold pins. Their costume, though simple, was nevertheless scrupulously neat; but although they possessed the most diminutive feet in the world, these beauties, with their oblique eyes, must have belonged to an inferior class of society, as the higher orders of women never shew themselves in public. On one side, but at the extreme end, there were also three or four girls, whose friends seemed apprehensive lest we should approach them. At our feet, on the

* This sketch is from the pen of a French naval officer, formerly stationed in the Chinese waters.

neighbouring benches, the good burghers of Canton, who had been probably sitting in the same place ever since the morning, were eating fruit and sweetmeats, which were supplied by ambulatory merchants; while others calmly smoked their metal pipes, whose narrow bowls will admit of only one pinch of tobacco at a time. A servant attends on each pipe, lighting it with a sort of phosphoric match; and this operation has constantly to be renewed, as a longer puff than usual is sufficient to exhaust the bowl.

All these people interested me very much; but the really exciting feature of the place, and of which we never grew tired, was the pit. Picture to yourself some thousands of Chinese stripped down to their waists, in order to save their clothes—their long queues rolled round their heads, lest these ornamental appendages should be laid hold of by the crowd—squeezing and pushing each other until they form a compact mass—a single block of human beings. There lies before you a sea of shaven heads, all of the same form and colour, as if it was the head of a single man repeated a thousand times in a multiplying mirror. Now calm, now agitated by an imperceptible movement, the surface of this sea presents the appearance of a brown cloth, dotted with flat noses, and eyes that wink with desperate excitement. Suddenly the waves, lulled for a time, become agitated by some unknown cause, dash forwards, then backwards, with irresistible force, and a deafening sound—a confused murmur of voices laughing, shouting, crying, and menacing. The heavy stakes which support the stage are scarcely strong enough to resist the repeated shocks of these rolling masses. In vain those who are nearest endeavour, by catching at the stakes, to make buttresses of themselves, to stay the impetuous flood—their arms at length drop, and they are speedily carried away under the scaffolding down to the river.

If everything in this strange theatre appeared to us curious and new, our presence produced assuredly the same effect on the assembly; for besides the investigations of which we were continually the subject, every burst of applause, as the play went on, was accompanied by the pretty Chinese girls, the beatified smokers, and even the unfortunate wretches forming the troubled sea of bald heads, all turning their eyes upon us, and seemingly endeavouring to discover the degree of interest we took in the spectacle.

After the mountebank had finished his tricks, the actors, whose dressing-room is a tent at the back of the stage, appeared, much to the satisfaction of the public. Ranged on each side of a high table, they wait until the manager has explained to the audience the nature of the piece they are about to witness. As soon as this formality—very rigorously observed in China—is completed, three or four personages, covered with magnificent robes, whose cost is said to be enormous, come forth majestically upon the stage. One of these individuals, in order to mark his supreme dignity, wears in his hat, in the manner of horns, the two long and beautiful feathers of the tail of a Barbary pheasant. He seats himself at a table, while the grandees of his court, the ministers of state, the literati, and the populace at large, remain respectfully standing in two rows before him. I was surprised to find in these costumes the exact reproduction of those I had been accustomed to see in Chinese designs—the rich dresses studded with gold and silver, the heavy wings attached to the head-dress, the flags issuing from all parts of the person, and, above all, the grotesque painting, the lines of black, white, red, and yellow, which render the human face a diabolical mask. I was informed that this was a representation of the earliest Chinese courts; that the costumes were scrupulously correct; and that the fashion of the period was for the nobles, according to their several ranks, to besmear their faces so as to render them unrecognisable.

The emperor or chief who sat at the table, in the course of conversation, appeared to accuse one of the great personages of his court of some crime. This man, who was dressed in black, and apparently belonged rather to the literary than the warlike class, immediately left his place on hearing this accusation, and falling on his knees, muttered in a distressing tone of voice a long prayer, frequently striking his head against the earth. The judge, however, was immovable, and pronounced sentence; and at intervals during his speech, the guards and assistants uttered in chorus a sharp discordant cry, which signified, as I was informed, acquiescence in the will of the prince. All at once, a woman in tears—a man plays the part—rushes on the stage: she is the wife of the prisoner, and throwing herself on her knees before the judges, implores their mercy. But her supplications and tears are all in vain.

So terminated one act of the piece, which appeared to interest very much the spectators; whose applause quite stifled the sound of the tam-tams, gongs, and other discordant instruments—instruments, however, far less discordant and piercing than the voices of the actors. Indeed, the efforts of these unhappy beings were distressing to witness; their eyes seemed starting out of their heads, and the veins of their necks were swollen to such a degree as to induce serious fears for their safety. Fatigued at length with the tumult, new and interesting as the scene was, I found that I had been quite long enough at the play; and as night was coming on, we soon afterwards retired on board our ship.

VIGILS.

A young and yet unbelted knight he seems
Watching his maiden armour by the well.
He standeth in the moonlight dim and gray,
With darkness round, on which his steady gaze
Is bent, expectant of some issuing foe.
The light of a great purpose seems to burn
In those bright, lucid eyes—and the young lips
Are white and stern with high expectancy.
So stands he silent in the silent light,
Pale, fixed, and eager—guarding those pure arms
Which Honour on the morn shall gird him with,
And send him forth on quests of high emprise
Her tried and loyal knight.

O ardent youth

On whom the mail of manhood hath not fallen,
Has not this scene a teaching good for thee?
Thou too hast arms to guard, God-given and fair.
Watch that no stain obscure their lovely sheen:
Watch through the night-hours for the envious foe
Whose birth is of the darkness, yet whose power
Harms not him standing in the gentle light
Of strong and glowing truth. Then hopefully,
With bright, unsullied armour, go thou forth
To fight for Truth with many a world-born wrong
Which reigns supreme, and drinks of human tears
As monsters did of old. Go, and fear not;
Fight through the Night, till breaks the blessed Dawn—
When thou shalt see a shining Presence stand
To crown thee victor from thy arduous strife
In Life's great lists, and heir to glorious lands
Won by thy wounds, O soldier of the Cross!

M. A. D.

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